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ABSTRACT

This second evaluation progress report concerns a 5-year project that links technology and the visual and performing arts with other subject areas to transform the education of K-12 students in Nebraska and nationwide. The report states that the project's focus is to develop curriculum models of engaged student learning using technology and resources of the Information Superhighway, and that a special emphasis has been placed on serving disadvantaged students in rural and urban areas. It also states that the project is being conducted by the Westside Community Schools in Omaha, Nebraska, and that five art museums are currently involved. The report relates that the "Community Discovered" project is making consistent progress in its training, classroom integration, and evaluation activities. It explains that the project focuses on enhancing education by developing interdisciplinary constructivist curriculum units that deliver the arts and art resources to the classrooms of Nebraska and the world via use of the Internet. The report explains that the evaluation process is well underway, with evaluation-related data being collected and systematically reviewed for formative input into specific project objectives and related project activities. Evaluation design is carefully matched to project activities and provides a 5-year plan for both summative and formative review. The report states that while the content/intent of the original goals remains unchanged, the organization and numbering of these objectives has been altered slightly. Appendixes contain goals, objectives, and student activities. (BT)

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I. Project Identification

Westside Community Schools / District 66

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Award No. R303A50443

The Community Discovered:
The Search for Meaning Through the Integration of Art and Technology in K-12 Education

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Evaluation Progress Report No. 2

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Submitted: September 30, 1996
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II. Project Summary

The Community Discovered , currently in its first year of operation, is a five-year project that links technology and the visual and performing arts with other subject areas to transform the education of K-12 students in Nebraska and nationwide. A special emphasis has been placed on serving disadvantaged students in rural and urban areas . The focus of this project is to develop curriculum models of engaged student learning using technology and resources of the Information SuperHighway. Five art museums are currently involved: The National Museum of American Art, Smithsonian Institution; The John F. Kennedy Center for Performing Arts; The Joslyn Art Museum; The Museum of Nebraska Art; and The Sheldon Memorial Art Gallery and Sculpture Garden.

This project is being conducted by Westside Community Schools in Omaha, Nebraska. *The Community Discovered* will expand on the mission of Prairie Visions: The Nebraska Consortium for Discipline-Based Art Education, at the Nebraska Department of Education. Prairie Visions is a consortium of nearly 100 Nebraska school districts, the Nebraska Department of Education, the Nebraska university system, three Nebraska art museums, and other arts and education agencies. Prairie Visions is sponsored by the Nebraska Department of Education, the Getty Center for Education in the Arts, and the Nebraska Art Teachers Association.

The Community Discovered builds upon and extends the impact of the initial pilot project, The Art and Technology Integration (ATI) Project, conducted by Westside Community Schools and Grand Island Public Schools in Nebraska. The ATI project received a two-year grant from the Excellence in Education Council, funded by Nebraska state lottery proceeds.

The Community Discovered project has five goals:

1) to promote and encourage academic achievement
2) to provide student equity in access to State and National museum resources
3) to enable educators to effectively use appropriate technologies for teaching and learning
4) to effectively integrate the arts into interdisciplinary curriculum projects
5) to create a national network of educators to support the development and implementation of appropriate learning strategies that integrate the arts and technology into other subject areas.

To facilitate realization of the goals and evaluation of the project, a three-tiered advisory board has been created and will be utilized throughout the project. The members of these boards are asked to interact with project staff for the purpose of guiding the evolution of the project and providing feedback regarding the outcomes. The members of the boards and the descriptions of the purposes are provided in appendix A. The three tiers are defined as the Board of Advisors (BOA), a group of nationally respected professionals

with connections to the goals and activities of the project: the Community of Friends (COF), a group of parents and community representatives who share an interest in the goals of the project and are vested in the success of the project as stakeholders in our communities; and the Council of Administrative Partners (CAP), representing individuals from each of the participating districts and partner agencies involved in the actual conduct of the projects activities. Each participating district has developed its own Community of Friends board and will be represented in the larger COF through annual meetings of these boards. Further, an on-line board of students will be developed and utilized as a student advisory body. This group, called the Student Advisory Partners (SAP) will include students across the K-12 continuum and from all participating districts. They will provide direction and feedback to project participants and the evaluation team through a listserv and focus group meetings. In this way they will provide a flow of information throughout the growth and development of the project. Participating students from each district are being identified this fall for inclusion during the '96-'97 school year. The co-chairs of the advisory boards are Senator J. Robert Kerrey and Dr. Elizabeth Broun, Director of the NMAA.

III. Project Status

Within its first year of operation, the project "The Community Discovered: The Search for Meaning Through the Integration of Art and Technology in K-12 Education" is making consistent progress in its training, classroom integration, and evaluation activities. As described in the Project Summary section, the project focuses on enhancing education by developing interdisciplinary constructivist curriculum units that deliver the arts and art resources to the classrooms of Nebraska and the world via use of the Internet. The project is a multi-element education program that: brings the arts and art museums into classrooms electronically; develops computer integration strategies; trains and supports teachers; builds curriculum, instruction, and assessment strategies; and seeks to build a nationwide community for the arts and technology integration. Ongoing activities have been combined with activities related to the Art and Technology Integration Project. The ATI project has provided an initial mechanism for many of *The Community Discovered* start-up activities, and has provided a valuable link to earlier success. ATI teachers have created, taught, and submitted curricular units based on the goals of the grant during the 1995-96 school year which will be revised and enhanced by *The Community Discovered* project. Throughout the past year, these teachers received training in creating integrated curriculum, various technology/Internet skills, and how to utilize the Arts in an interdisciplinary unit. Many of the skills learned in these training sessions have been passed on by ATI participants to new Community Discovered participant teachers. ATI participants have also broken ground by taking part in evaluation activities. They have provided samples of students' projects to the evaluation team, made students available for interview sessions with the evaluation team, and permitted access by the evaluation team to classroom projects and activities that met the goals of the grant. District site coordinators have also played an important role in

providing both technical and curricular support to participants. They have also worked to maintain the enthusiasm of the participants by providing help to teachers and students both in and out of the classroom.

The Evaluation process for *The Community Discovered* project is well underway, with evaluation related data being collected and systematically reviewed for formative input into specific project objectives and related project activities. The evaluation design is carefully matched to project activities, and provides a five year plan for both formative and summative review (see appendix B). The evaluation is essentially that of an "impact analysis". In evaluation studies, impact analysis can be defined as "determining the extent to which one set of directed human activities affected the state of some objects or phenomena, and . . . determining why the effects were as large or small as they turned out to be" (Mohr, 1992, p.1). In this examination of the effectiveness of *The Community Discovered* project, the evaluation design is focused on analyzing data related to each of the five goals and related project objectives. The evaluation determines the general impact of the project on K-12 education in the participating schools, and includes a careful examination of the learning environments for both students and teachers. The evaluation also examines the potential use of the project as a model for replication by other educational institutions and organizations.

The evaluation process uses multiple sources of information, and includes a comprehensive approach to data collection that is targeting information related to each project goal and objective. These data types include: 1) teacher survey data, 2) electronic data, such as listserv participation and electronic logs, 3) classroom observations and videotaping, 4) teacher and student interviews, 5) student projects and portfolios, 6) teacher growth plans, 7) focus groups, 8)standardized test data, 9) attendance records, 10) trends in disciplinary actions, 11) stakeholder surveys, and 12) changes in school structure. All data is summarized and placed within a World Wide Web page format that is available for review by the project staff, participants, and interested stakeholders. An evaluation team derived from the Office of Internet Studies (OIS) in the College of Education at the University of Nebraska at Omaha (UNO) is coordinating the evaluation process with assistance from West Ed Laboratories, an additional source of external review.

The evaluation process emphasizes the blend of both quantitative and qualitative data analysis, with conclusions and implications for each reporting period based on multiple sources of data. Reports such as this one, are being produced for each reporting period, with additional formative feedback provided to the project between reporting intervals (i.e. summaries of teacher survey data), and through dissemination using the evaluation-related World Wide Web page. The status of each project objective (along with organizational goals and related evaluation activities) is summarized in the following narrative.

It is important to note that the goals and objectives have evolved slightly from their original format as written in the original application. While the content/intent of the original goals and objectives remains

unchanged, the organization and numbering of these objectives has been altered slightly (as per progress report of 2/96). Minor modifications in wording and expansions of activities are noted in appendix C for consideration and approval of the funding agent.

Goal 1: To enable students to achieve high academic standards in art and other core subject areas.

Objective 1.1 80% of students in classes using the modules will show evidence of improved academic achievement as indicated by: a) decline in absenteeism, b) increased student self-concept as indicated by student attitude surveys and focus groups, c) students performing at higher levels as determined by each school's assessment of student progress and electronic portfolios where used.

Activities	Timeline
• Conduct a longitudinal survey of student attendance records.	1996-2000
• Perform an annual student attitude survey (subject area/technology).	1996-2000
• Analyze annual focus groups for students.	1996-2000
• Collect standardized test information on student performance.	1996-2000
• Collect teacher progress reports on involved students.	1996-2000
• Have students create an electronic portfolio/multimedia presentations.	1996-2000
• Conduct case studies of selected students involved.	1996-2000
• Collect samples of student work created during unit involvement.	1996-2000

Evaluation Plan

• Student attendance records to track absenteeism.	1996-2000
• School records inventory to examine standardized test data.	1996-2000
• Narrative summaries of focus group feedback.	1996-2000
• Analysis of student attitude survey.	1996-2000
• Student progress reports of students involved in integrated constructivist curriculum projects.	1997-2000
• Panel review of student work from integrated constructivist curriculum.	1998-2000
• Case studies of students who have been taught over the course of the project which have been selected by involved teachers.	1996-2000

Status

The Community Discovered project is well underway for this first year of activities, and participating teachers have started to develop and initiate appropriate planning and delivery of curricular units. Each of the participating teachers are building on the training they received over the previous summer, which provided extensive experiences in technology and discipline based art. Professional development activities emphasizing constructivism, interdisciplinary planning and teaching, and integration strategies are in progress. Teachers are also preparing to periodically assess student performance following relevant lessons using a World Wide Web page journal/log process which is accessible over the Internet. In addition, participating teachers have also selected individual students to examine more extensively for a student case study process. Teachers are also initiating work on their curriculum modules/units, using a standard format which will be refined over time based on participant input. These modules will be made available over the project web page. Each unit will be linked to the National Goals for Education, the National Standards for all disciplines, the State Frameworks for all disciplines, District Outcomes for the participating districts, teacher-learner outcomes identified by the participating teachers, student-learner outcomes identified by the participating teachers as related to their specific curricula, and the goals of The Community Discovered. Using a centralized database, these unit plans will be accessed by searches on any of those links or by search parameters linked to artists, arts form, or a particular teacher.

Student development work has also been initiated. Some students have developed electronic products such as HyperStudio stacks or other lesson-based electronic products utilizing a variety of educational technology tools such as Clarisworks. These electronic student products and multimedia projects will eventually be used to help establish project-related electronic portfolios, which will be examined for evidence of student achievement. Student attitude surveys are currently being developed by the evaluation team, and school related attendance and standardized achievement data will be gathered and analyzed at the end of the academic school year. Student focus groups are being planned for the end of the academic year, and an interview protocol is being developed. Within the population being served, subgroups of students who are at-risk for academic failure or who have been verified for special education services are being identified for targeted evaluation activities. Specific evaluation plans related to subgroups within the population (e.g. students with hearing loss, students with language-learning disabilities) are being developed. Working with other faculty within the University of Nebraska system, the Project Director and the

Evaluation Team are guiding these research strands and directing the work of graduate students from the related disciplines to conduct this line of investigation.

Goal 2: To provide students and educators in rural and disadvantaged urban areas with equal access to the nation's information and art museum resources.

Activity I: The Electronic Art Museum in the Classroom

Objective 2.1 A minimum of 750 art images will be available through the Internet along with curriculum and contextual information for use by educators and students. Images will come from the collections of the Smithsonian NMAA; the Getty Museum; the Joslyn; the Sheldon, and MONA.

Activities	Timeline
• Teachers will request images to be digitized and museums will honor these requests.	1996-2000
• The museums will digitize at least 750 art images from their collection (collectively each year) on which copyright issues are resolved.	1996-2000
• Contextual information to accompany each image will be developed.	1996-2000
• Hypertextual information to accompany each image will be developed.	1996-2000
• Educators will access the images along with contextual information.	1996-2000
• Teachers will review the Smithsonian's thematic cluster CDs for potential resources.	1996-2000
• A database of images will be created.	1996-2000
• Museum links will be updated regularly on the ARTnet web site.	1996-2000

Evaluation Plan

• Survey of museums about number of images selected and digitized will be conducted.	1996-2000
• Analysis of range and quality of images will be conducted.	96, 98, 2000
• Electronic log of "hits" by teachers and by students on digitized images database will be analyzed through Web Site analysis.	1996-2000
• Survey of teachers and students using digitized images resources will be analyzed.	1996-2000
• Survey of hardware and software availability for teachers and students will be analyzed.	1996-2000

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- Structured interview of museum personnel will be conducted. 1996-2000
- Site visits to workshops, presentations, etc., will be conducted. 1996-2000

Status

Community Discovered teachers participated in a week long summer workshop at The National Museum of American Art (NMAA), Smithsonian Institution, to review available works, learn methods of integrating these images into various curriculum areas, and plan for their classroom use. In addition, discipline based art training was conducted in a two week workshop at the Prairie Visions Institute. Following the summer training, project teachers are now in the process of planning the integration of visual images into classroom activities. Teachers are also linked to museum personnel and educators by use of a project facilitated listserv, which facilitates ongoing communication between project participants, and provides additional information for the formative evaluation process. Constructivist pedagogy requires holistic thinking and integration of all disciplines. To promote such efforts and empower teachers to employ interdisciplinary constructivist planing and teaching it was necessary to include all art forms and not only the visual arts. Therefore, project activities have been expanded to include the performing arts, and the project is benefiting from direct collaboration with The Kennedy Center for the Performing Arts and statewide arts agencies. The NMAA has taken a strong leadership role in initiating museum-related activities in the project, and has been working through many technical and copyright constraints related to image scanning and publishing. An electronic request form has been established for use by teachers to facilitate planning for retrieval of arts resources. Additional partner museums are now on-line and are working towards establishing Internet connectivity to make some of their works available electronically to the project. The formative evaluation process has included a focus group analysis, questions on stakeholder and teacher surveys, and electronic monitoring of web site and listserv use. Additional surveys and interviews will systematically examine museum related activities during the second semester of each academic year. Site coordinators are actively meeting with teachers to assist them in brainstorming ideas for upcoming units while also assisting them in locating and integrating appropriate art images into these units. Site Coordinators are also offering technical assistance to teachers in their search for images and in the utilization of these images in the classroom with students. A major thrust of the site coordinators is to help the participants create a classroom atmosphere in which students are utilizing the art resources and technology to create their own learning experiences.

The Project Director is working with members of the BOA, COF, CAP and other experts to determine the most effective architecture for videoconferencing and distance education. Consistent with the original objectives of the project and with the expanded view of the arts, it is increasingly important for classrooms to be linked to outside resources in a way that promotes interaction on-line. With rapid changes in telecommunications and technology application t is incumbent on the leaders involved with *The Community Discovered* to explore and make available the resources necessary for such access and connectivity. To this end, the Project Director is working closely with representatives from cable TV, satellite systems (i.e.: NebSat), telephone companies and telecomputing agencies to determine the optimal integration of resources and to develop the consortium resources needed to make videoconferencing and distance education available to participating sites.

Objective 2.2 Museum educators at the Joslyn Art Museum, the Sheldon and MONA will each develop at least one educational outreach program using appropriate technologies such as the Internet, kiosk, and interactive multi-media.

Activities	**Timeline**
• Museums will develop and document outreach programs using CD/ROM and/or Internet.	1997-2000
• Documents related to outreach programs will be collected.	1997-2000

Evaluation Plan

• Structured interviews will be conducted with the museum educators.	1997-2000
• Documentation related to outreach programs and plans will be summarized.	1997-2000

Status

Museum educators are working hard to establish full Internet connectivity and to establish a local process to gain approval for digitizing and sharing images related to their local collections. The Joslyn Art Museum is in the process of establishing Internet connectivity, and the Sheldon Art Gallery has already started to digitize images. These educators are contributing to ongoing communication over the project listserv in order to help share lesson ideas and provide periodic suggestions to teachers. Participants and site coordinators are also contributing information to museum educators regarding images and

art resources which would be highly desirable to digitize. Site coordinators are working with museum educators to provide participants access to educational packets and information regarding new exhibits and shows. Each participating museum is also establishing a project related plan for developing kiosk, multimedia, and Internet-based outreach programs. The evaluation process related to this objective has focused on a stakeholder survey that included museum partners. It also included the sharing of museum related written information and brochures, and the monitoring of listserv dialogue. Structured interviews and additional on-site visits are planned for the upcoming year as the activities at each site expand with electronic connectivity.

One example of the use of such connectivity is the collaborative efforts currently in progress associated with the upcoming exhibit of the works of William H. Johnson, to be located at the Joslyn museum this spring. These works are from the holdings of the NMAA and will be the centerpiece for a number of curricular units being constructed by participating teachers. In conjunction with this exhibit there are plans underway for students to work with docents from both the local and national museums via e-mail and desktop conferencing in pursuing their classroom work, to develop and conduct student-docent tours of the exhibit both at the Joslyn and using virtual tours for those students not able to visit the museum; for collaboration between docents at both museums in helping teachers and students utilize the educational packets prepared in conjunction with the exhibit, and for integration of important performing arts works available from the Kennedy Center and local artists.

Goal 3: To enable educators to effectively use appropriate technologies for teaching and learning in art and other core subject areas.

Activity II: Computer-Based Educational Strategies
Activity III: Professional Development and Support for Educators

Objective 3.1 Through collaboration with private companies, project educators will test and evaluate five commercial technology tools (i.e. software packages) per year for applicability to classroom settings and instructional objectives.

Activities	**Timeline**
• Educators will test, evaluate, and adapt selected commercially produced	1996-2000

technology tools in classroom settings.

- The project will conduct several meetings via interactive video. 1996-2000
- Students will collaborate using video conferencing of CUSeeMe. 1997-2000
- One classroom will pilot the use of EMG's video on demand and live interviews with experts. 1997-2000

Evaluation Plan

- Documentation related to tool review and evaluation will be collected and summarized. 1996-2000
- Observations will be conducted and summarized related to video conferencing activities. 1996-2000
- Participant evaluation forms related to interactive video conferencing will be summarized. 1996-2000

Status

Working closely with the Apple Computer Corporation, the project has purchased curriculum based computer software bundles for Community Discovered teachers. These bundles included resources related to elementary, secondary, writing and publishing, mathematics, multimedia, and biology (with probes). In addition, participants in the ATI pilot project have reviewed approximately 45 different software programs that were made available for review on January 31, 1996. The NMAA is continuing to refine an institutional CD-ROM which will include selected works and will be distributed to interested teachers. An interactive video-conference meeting was held on September 26, 1996, which overviewed suggested uses of the computer bundles and revisited project goals and the evaluation process. A software evaluation tool is being developed by *The Community Discovered* staff for teacher use in evaluating this new software. The evaluation team has monitored the distribution of computer bundles, the software review process, and initial video-conferencing activities as part of the formative evaluation process related to project-based teacher training and support.

Objective 3.2 By 1996, each school site in participating districts will have access to a technology resource person available to assist teachers in evaluating and selecting appropriate technologies.

Activities	Timeline
• Technology resource persons from participating districts, NDE, UNO, the ESU's and from commercial companies will be identified.	1996-2000
• Technology resource persons will conduct software workshops.	1996-2000
• Technology resource persons will provide technical assistance for hardware and software.	1996-2000
• A log of workshops held will be maintained by the project office.	1996-2000

Evaluation Plan

• A database of technology resource persons identified and their area of expertise will be maintained.	1996-2000
• A log of workshops held, including date, topic, and presenter, will be examined for compatibility with project goals.	1996-2000
• Survey of teachers about the use of technology resource persons will be conducted.	1996-2000

Status

Nineteen Nebraska Educational Service Units (ESU's) have been informed of *The Community Discovered* project and have offered their support and participation. As part of building this technical support network, a database which includes names, addresses, phone numbers, and electronic mail addresses of 30 support personnel across the state has been distributed to teacher participants. Each ESU related to the project sites is working with the districts to ensure a direct connection of district buildings and classrooms to the Internet. In addition, the Winnebago School District (an Indian reservation) is receiving some networking support directly from U.S. West. Site coordinators are also currently providing technical assistance with hardware and software to teachers and their students. The site coordinators are offering personal training sessions on utilizing new software and hardware to participants. These sessions are being held at individual schools with participants who request the extra help. To enhance the formative evaluation process related to technical support, the evaluation team is working closely with the Educational Service Units to blend state-wide evaluation tasks with those of *The Community Discovered* project. This includes the modification of a state distributed survey to include questions regarding *The Community Discovered* project, and the modification of a structured interview protocol already being used in debriefing technology resource persons in the state.

Objective 3.3 By 2000, 300 Nebraska educators, including 60 educators of rural and urban disadvantaged students, will be trained on computer-based educational strategies and integrated constructivist curriculum to effectively integrate art and technology.

Activities	Timeline
• During the first year, teachers will attend a one week workshop at the Smithsonian.	1996-2000
• Participating teachers will attend a two week Prairie Visions Institute.	1996-2000
• Each participant will identify a partner with whom to collaborate on curriculum integration. The partner will attend a one day curriculum integration workshop.	1996-2000
• Teachers will review, analyze, and integrate art resources.	1996-2000
• Teachers will complete personalized growth plans.	1996-2000
• Workshops on curriculum integration, constructivism, electronic portfolios, and technology will be held.	1996-2000
• Teachers will videotape at least two lessons for review.	1996-2000

Evaluation Plan

• Teacher growth plans will be reviewed and summarized.	1996-2000
• Survey of practice of teachers to examine if and how new skills are being implemented.	1996-2000
• Focus groups of educators will be conducted and summarized for feedback.	1997-2000
• Case studies of 5 teachers who have participated throughout the project will be conducted.	1997-2000
• Site visits to a sample of workshops will be conducted and summarized.	1996-2000
• Videotapes of teacher lessons will be reviewed.	1997-2000

Status

The participants for year one of *The Community Discovered* project were selected from formal applications and resulted in nine (9) teachers from Westside Community Schools.

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ten (10) teachers from Grand Island Public Schools, five (5) teachers from Lexington Public Schools and four (4) teachers from Winnebago Public Schools. All applicants were notified by early March of their status, and those selected began project related professional development with an orientation meeting on April 19 that included introduction to on-line resources related to the project, an overview of the project goals and objectives and an introduction to the evaluation process. This was followed by a full-day staff development experience on April 24 conducted by staff from the NMAA, introducing participants to resources and on-line search strategies for accessing these resources. Intensive training activities began during the summer of 1996 at The Prairie Visions Institute and at The National Museum of American Art. Including the teachers already involved in the Art and Technology Integration pilot project, a total of 45 teachers have now participated in training activities directly associated with the integration of art, technology, and constructivism to support curricular goals in *The Community Discovered* project. These teachers are also working as mentors for numerous other teachers at their local sites and districts. Teachers within the project have identified partners with whom they will team in constructing and teaching units throughout the year. Site coordinators are maintaining communications with these participants and their partners and assisting them in reviewing, analyzing, and integrating the Arts into their units. Site coordinators have also met with participants on an individual basis to assist in completing personalized growth plans. These growth plans have been collected and copies have been turned in to the evaluation team. Base line videotapes have been made of new participants and these have been submitted to the evaluation team for use in analyzing teacher behaviors associated with the qualities of constructivist teachers. Changes in teacher behaviors will be identified by comparing the base-line videos to tapes of teachers t the end of the first year and each subsequent year of the project.

The evaluation team has initiated a World Wide Web based teacher log process, which asks teachers to answer prompted assessment questions at the end of every curriculum integration activity which is a direct result of *The Community Discovered* project. Teachers received training in this log process at a video-conference on September 26th, 1996. A focus group protocol has also been developed and refined with feedback from teachers involved in the ATI project. A baseline teacher survey for *The Community Discovered* project has been analyzed and representatives of the evaluation team have visited (and often videotaped) selected summer training activities, as well as ongoing activities in the classroom. Teacher case study subjects will eventually be selected upon further analysis of videotaped baseline lessons submitted by teachers.

Objective 3.4 **By 2000, 90% of project participants will demonstrate an increase in skills and knowledge in: a) use of computer-based educational strategies and resources, b) constructivism, c) curricula integrating art and other core subjects, d) use of electronic portfolios and other appropriate assessment strategies.**

Activities	Timeline
• Each participant will be assigned a curriculum integration mentor from the Prairie Vision faculty.	1996-2000
• NDE curriculum directors and ESU specialists will provide assistance in core subject areas.	1996-2000
• Each participant will use electronic portfolios to reflect on their progress.	1996-2000

Evaluation Plan

• Survey of teacher skills and knowledge in a, b, c, and d.	1996-2000
• Collect lists of curriculum mentors.	1996-2000

Status

Teacher participants have received considerable in-service education so far, including two orientation days in April, ten days at the summer Prairie Visions Institute, five days at the summer NMAA workshop, and one follow-up day in September 1996 via video-conference. To date, the in-service education process has focused on a baseline orientation to the goals of the project, the theoretical foundation in constructivist educational philosophy, discipline-based art training, and the technical skills necessary for using the Internet and the World Wide Web. A tutorial videotape on the creation and use of bookmarks has been developed and distributed to each site as a follow-up to "hands-on" training. Additionally, resources texts on constructivist teaching, use of technology-based visual tools associated with the constructivist approach, museum catalogs and other reference materials for professional development have been purchased and distributed to each site. Abstracts of related professionals resources are being prepared and made available on the web site. These will be linked to particular teacher's contributions and to other Internet resources as this 'cyberlibrary' evolves. Site coordinators have also established local support activities including local workshops for invited colleagues,

informal brainstorming meetings, and individual question and answer sessions. The project in-service education process and site support activities will continue throughout the academic year and will focus on reinforcing classroom integration strategies.

The evaluation team has already surveyed the participating teachers for baseline information related to each of the areas of art, technology, constructivism, and teaching philosophy as well as obtained a videotaped sample of their teaching. In addition, surveys acquiring teacher feedback related to the summer training activities have also been summarized and teachers continue to share their ideas and suggestions spontaneously over the project listserv. In addition, teachers from the pilot Art and Technology Integration project continue to share their experiences and suggestions over the listserv with current participants. The teachers from this earlier pilot project have also been formally debriefed by individual interview, and have participated in several focus groups relative to providing constructive input and formative evaluation for the current Community Discovered project. More complete summaries of these activities will be included in the report submitted at the end of this funding period.

Objective 3.5 90% of project participants will successfully complete a minimum of 80% of the professional development activities they choose in their Professional Growth Plans.

Activities	**Timeline**
• Each participant will create a Professional Growth Plan.	1996-2000

Evaluation Plan

• Review of Growth Plans for compatibility with project goals.	1996-2000
• Survey of teachers related to Professional Growth Plans.	1996-2000

Status

The Community Discovered project has established a Teacher Growth Plan form that all teachers in the project have completed relative to their initial personal goals for the project. This Growth Plan form includes personal goal setting related to the areas of 1) tentative action plans, 2) data collection, 3) artifacts, 4) timelines, and 5) personal support needed. These growth plans are being reviewed by the school administrators, project staff, and the evaluation team for the purposes of formative evaluation and for providing individual assistance to current participants in the project.

Objective 3.6 90% of project participants will report positive attitudes towards the use of technology as an educational tool.

Activities	Timeline
• A survey of technology attitudes will be completed each year.	1996-2000
• **Evaluation Plan**	
• Attitude survey of teachers about the use of technology as an educational tool will be conducted and analyzed.	1996-2000
• Teacher participants will be interviewed at the end of the academic year as an additional data source related to technology attitudes.	1996-2000

Status

Participating teachers in *The Community Discovered* project have been surveyed for their baseline attitudes and practices related to technology use. The attitudes of these teachers were already quite positive before entering the project. This high initial attitude was indicated by their responses to the survey statement of "computers can play an important role in the instruction of my discipline", where 71% strongly agreed with the statement, and the remaining 29% indicated that they agreed with it. The use of technology by these teachers previous to the project was also quite high, with 58% saying that they frequently used computer technology, 25% saying that they often used it, 13% that they sometimes used it, and 4% saying that they rarely or never used computer technology.

Teachers from the pilot Art and Technology Integration project, reporting on past experiences similar to those planned for The Community Discovered, also suggested that not only their own but their student interest improved in the project with 43% rating the interest of their students as "much improved", and 47% identifying student interest as "improved". Evaluation work will follow-up this initial survey process and will examine additional teacher interviews, surveys, and focus groups to gather more specific information related to both teacher and student attitudes.

Objective 3.7 An additional 200 Nebraska educators, alumni in the Prairie Vision Consortium, will participate in at least one project-sponsored workshop session per year.

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Activities	Timeline
• Workshops on a variety of topics will be held each year in various locations.	1996-2000
• Each participant will select an additional workshop on technology.	1996-2000

Evaluation Plan

• Lists of teacher participants related to professional development institutes and workshops will be collected.	1996-2000

Status

Teachers in *The Community Discovered* project participated in a two week summer workshop at The Prairie Visions Institute and received training related to Discipline Based Art Education. The Prairie Vision Consortium helps support the summer institute and was initially established by the Nebraska Art Teachers Association and the Nebraska Department of Education, with support from the Getty Center for Education in the Arts. It includes over 90 public and private school districts in Nebraska. Related to the goals of *The Community Discovered* project, the consortium has also developed a computer assisted process for keeping track of alumni and has helped partners in *The Community Discovered* project link with each other in some of the initial project activities. Site coordinators are also keeping participants informed of workshops available to them which would enhance their skills and goals of the project. *The Community Discovered* supports Prairie Visions by serving on the Advisory Council, employing an Art and Technology Coordinator and a Computer Specialist to maintain the ARTnet web site, and by providing fiscal support for planning, operation, faculty resources and professional development activities.

Goal 4. To enable educators to implement effective integrated curricula incorporating art and other core subjects.

Activity IV: Integrated Curriculum, Instruction, and Assessment Strategies

Objective 4.1 A minimum of 632 constructivist curriculum modules will be developed and implemented incorporating one or more of the following a) Internet digitized images and museum resources, b) other Internet resources, c) multi-media projects, d) electronic portfolios, e) other computer applications. (Goals 1-4)

Activities	Timeline
• Each teacher will develop two units during the first year and one unit in each successive year during the term of the grant.	1996-2000
• The units will be indexed and placed on the world wide web server.	1997-2000
• Participants will receive school year and summer support to work on their projects.	1996-2000
• Partners will work with mentors and partners	1996-2000
Evaluation Plan	
• Survey of teachers about the number of constructivist curriculum modules developed and implemented that use computer-based resources.	1996-2000
• Review of project Web Sites related to constructivist curriculum modules will be conducted by panel review.	1996-2000

Status

Teachers in *The Community Discovered* project are beginning to plan their curriculum units and refine their lessons based on classroom use. A standardized format has been developed collaboratively in the project and will provide consistency in unit organization and presentation. Unit plans for the school year will be completed by the end of April of each year with summer writing time to be spent on the revision and refining of these plans and the planning for upcoming units. These constructivist curriculum modules will be stored on the project World Wide Web site for retrieval and use by interested educators from around the world; linked to the National Goals for Education, the National Standards for all disciplines, the State Frameworks for all disciplines, District Outcomes for the participating districts, teacher-learner outcomes identified by the participating teachers, student-learner outcomes identified by the participating teachers as related to their specific curricula, and the goals of The Community Discovered. Using a centralized relational database, this structure allows visitors to the web site to search according to any of these goals, artists' names, arts form, curricular area, grade level or theme.

Some example constructivist curriculum modules have already been developed and made available by the teachers in the initial pilot ATI project. These earlier units and lessons are now being used as models for the current Community Discovered project, as well as for formative review in the evaluation process. They are all multi-disciplinary in nature and include a wide variety of individual topics including:

- the use of paintings for the instruction of geometry topics such as tessellations
- the understanding of the Native American experience through art
- the cultural legacy of Latino Americans as represented by their art
- the understanding of American folktales through art
- the representation of endangered species in the arts of many cultures
- the cost and history of American freedom as represented through paintings and sculpture
- the use of art in the integration and illustration of physics and motion
- the contribution of various cultures to Nebraska as illustrated by works of art
- the use of art in the student presentations of other countries, such as Japan, China, etc.
- the effects of acids, bases, and other chemicals on outdoor sculptures
- the illustration of poetry with art images
- the communication of ideas through art and its use in high school counseling
- the use of art in speech classes and the ways artists classify their art
- the study of the American Depression through art images of the 1920's and 1930's
- the study of Japanese internment of World War II and its tragedy through art images
- the discovery of self in the American Westward expansion as seen through art images

Objective 4.2 90% of participating teachers will effectively use one or more computer-based education strategies in their classrooms. Strategies will include Internet resources, electronic portfolios, Hypertext, multimedia, and others.

Activities	**Timeline**
• Site coordinator will work with each participating teacher to develop strategies and units.	1996-2000
• Site coordinator and evaluators will provide feedback.	1996-2000
• Smithsonian staff will provide assistance and resources.	1996-2000
• Teachers will videotape at least two lessons involving their teaching.	1996-2000

Evaluation Plan

• Attitude survey of teachers about the use of constructivist curriculum modules.	1996-2000
• Videotapes filmed by partners of samples of lessons to observe teaching and student learning in integrated curriculum activities will be analyzed.	1996-2000

- Site visits/teacher interviews to observe implementation of sample integrated constructivist curriculum will be conducted. 1996-2000
- Focus groups of students involved in integrated constructivist curriculum will be conducted. 1996-2000

Status

Initial training, including summer workshops at The Prairie Vision Institute and The NMAA, has been conducted for participating teachers in *The Community Discovered* project. Previous training has included fundamental training in technology, art, and constructivism topics, and future training will now focus on supporting the overall integration goals of the project. Project teachers have also received equipment and computer software bundles related to the project and are beginning to plan and develop their particular curriculum modules. The site coordinators are also beginning to provide additional individual training and mentoring activities at each site as necessary. Site coordinators are meeting with participants and their partners to help develop and implement the unit plans. Through use of the listserv, teachers are maintaining communications links with not only other teachers in the project but also with the museum contact people. Site coordinators are assisting to videotape constructivist lessons and capture archival data from these lessons.

The evaluation team has already surveyed the teachers for baseline information on their backgrounds and teaching philosophy and obtained a 10 minute videotaped sample of the teachers involved in the teaching process. Site visits have also occurred with some teachers, and teachers in the pilot ATI project have participated in structured interviews and focus groups relative to the formative evaluation process. A formal evaluation report has been completed with respect to the pilot ATI project and is being reviewed for implications related to the current Community Discovered project.

Objective 4.3 By 2000, the project will produce a comprehensive system of world wide web pages containing links to art resources and sample lessons developed by participating schools and available to Prairie Visions Consortium members through ARTnet.

Activities **Timeline**

- The site coordinators will develop district world wide web pages containing links to art resources and curriculum integration units. 1996-2000

- Project Director will coordinate the development of the home pages. 1996-2000
- Program Coordinator will help develop the district pages and lessons using a standard format. 1996-2000
- Site coordinators will develop a database of units and art resources for their district. 1996-2000
- Program Coordinator will compile the site databases. 1996-2000
- ARTnet facilitator will link project resources to Prairie Vision members. 1996-2000

Evaluation Plan

- A review of project World Wide Web sites for lesson quality and appropriateness to project goals will be conducted. 1996-2000

Status

The project has established its own comprehensive World Wide Web page, which is available at the address of:

http://nde4.nde.state.ne.us/ARTnet/cd/

The project World Wide Web page is evolving and eventually will include access to all the project curriculum modules, general project information, samples of student work, and will link to a World Wide Web page related to evaluation information. In addition to access from a link on the general Community Discovered project page, the evaluation information for the project can also be accessed directly at:

http://omahafreenet.org/cd/

This page includes links to all of the evaluation information, including the evaluation design, sample instrumentation, analysis of various data sets, and formal evaluation reports (such as this one).

In addition to the World Wide Web pages focused directly on *The Community Discovered* project, the project has also worked closely with ARTnet, where a more general list of resources and links is being maintained and can be accessed at:

URL: http://www.nde.state.ne.us/ARTnet/ARTnethome.html

The ARTnet is an on-line resource maintained by the Art and Technology Coordinator and Computer Specialist employed by *The Community Discovered* and in cooperation with the Nebraska Department of Education, Prairie Visions, to help support the arts as a core subject in the K-12 curriculum, and it is an important link in *The Community Discovered* project's web page system. The current ARTnet web page has also been updated to include links to The Getty Center for Education in the Arts and the Kennedy Center's ARTSEDGE, which provide not only general lesson plans and other curriculum resources, but also a working model for *The Community Discovered* teachers.

Goal 5: To create a national network of educators to support the development and implementation of appropriate learning strategies integrating art and technology with other core subject areas.

Activity V: Nationwide Community for Art and Technology Integration

Objective 5.1 ARTnet will be in place to provide curriculum models, museum resources, and continuing opportunities for information sharing, collaboration and support among educators.

Activities	**Timeline**
• ARTnet will link participants and experts	1996-2000
• ARTnet will provide access to curriculum modules, digitized images, and other museum resources	1996-2000
• ARTnet will support the ARTnet listserv and project related distribution lists	1996-2000

Evaluation Plan

• Electronic hits related to the use of NE ARTnet resources by Web Page resources will be summarized.	1996-2000

Status

This outreach goal for the project is primarily being developed through an ongoing collaboration with ARTnet, which is the electronic network created by Prairie Visions and The Nebraska Department of Education. This network is already operating successfully as

a listserv, and World Wide Web site with electronic links to and from *The Community Discovered* Web page. The web site currently receives more than 1500 visitors to the home page each month, and initial work is beginning on an on-line Student Art Gallery related to the project. ARTnet is also a useful source of technical assistance for participants in *The Community Discovered* project, and the evaluation team is documenting its use and effectiveness as a resource to project participants, through the use of both teacher survey and electronic data collection procedures.

Objective 5.2 Cross-state partnerships will be in place to support replication of project activities.

Activities	Timeline
• State-level leadership teams from the central and mountain states	
• and from the Getty institutes will learn how to replicate the project	
• through the Institute, site visits, and electronic networks.	1996-2000
• Annual teleconference with Getty Center for Education Regional	
• Institute leaders will indicate positive attitudes about art and	
• technology integration and willingness to replicate project activities.	1996-2000

Evaluation Plan

• Interviews related to cross-state partnerships about support and replication	
• project activities will be conducted.	1996-2000

Status

Although cross-state partnership activities are not formally underway, relationships are already developing through both electronic and personal communications between the project and other interested individuals and institutions. As these personal contacts expand, additional electronic conferencing activities will be held to solidify the evolving partnerships. Electronic feedback for use in the evaluation process will also be solicited through web page forms, listserv participation, and electronic mail to document the potential uses by other states. Participants within the project are currently planning Internet projects which will link participating school districts utilizing the William H. Johnson exhibit which will be opening at the Joslyn in March of 1997.

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Objective 5.3 **As a pilot cross-state partnership, *The Community Discovered* project and the Ohio Partnership for the Visual Arts will collaborate to expand on an effective integrated project in which middle school students use computer networking and video technologies to teach other about their social, cultural, and physical environments.**

Activities	**Timeline**
• Students will share and discuss their work with peers using the Internet.	1996-2000
Consider additional activities.	

Evaluation Plan

• Structured interviews of pilot cross-state partnership participants will be conducted.	1996-2000
• Student work published on the Internet, related to the project, will be reviewed for relationship to project goals.	1996-2000

Status

As with all cross-state partnership activities, to reduce costs, activities related to establishing an alliance with the Ohio Partnership for the Visual Arts will focus primarily on the use of electronic based collaborations using electronic mail, listserv, and CUSeeMe based communication. A process for electronic data collection, as well as a structured interview process related to this objective, is being developed by the evaluation team.

Additional objectives related to cross-state partnerships from the original application, as expressed in the last formal report, have been embedded in the current objectives as a cost saving measure necessitated partially by budget reductions from the original application.

Summary

A successful beginning has taken place for the project "The Community Discovered: The Search for Meaning Through the Integration of Art and Technology in K-12 Education" and it is now well underway in its first year of formal activities. The project has continued to embrace advanced information-based technologies and has refined its plans as technology-based applications continue to evolve with emerging capabilities, such as new capabilities on the World Wide Web. The project is building upon a strong organizational foundation provided by the Art and Technology Integration project, a state funded pilot project for the current *The Community Discovered* project.

The Community Discovered project has already provided substantial baseline training in technology, the arts, and constructivism to its teachers including extensive summer training at both The Prairie Visions Institute and The National Museum of American Art, Smithsonian Institution. The NMAA continues to provide solid leadership and ongoing support to museum-related goals of the project, and the ongoing work on electronic images by the project's group of museums promises to provide a rich resource for the integration of art into other disciplines via the Internet. In addition, the project is drawing upon successful and extended collaboration with ARTnet, an electronic communications network of discipline-based art educators, and has established a new partnership with The Kennedy Center for the Performing Arts.

The evaluation process is also well underway, and specific evaluation activities as related to each project objective are being initiated. These evaluation activities draw upon comprehensive data collection procedures that use both quantitative and qualitative approaches. Initial evaluation work has focused on providing careful baseline information and has included extensive survey work with both teachers and other stakeholders. Teachers have also submitted videotaped examples of their teaching and continue to provide information over the listserv and in personal interviews. Classroom visitations and observations are also underway. In addition, the evaluation team has established a WWW page for use in organizing and disseminating all the collected evaluation information, including the evaluation plan, developed instruments, data summaries, and electronic copies of formal reports. Work continues on collecting the evaluation information needed for year one of the evaluation process that will be used systematically in a formative as well as longitudinal evaluation process.

As *The Community Discovered* project continues to move forward, perhaps most importantly, there is a real team effort underway by all stakeholders in the project to positively effect the learning environment for all students. As any project on the "cutting edge", it is expected that *The Community Discovered* project will continue to evolve as the collaborative and organizational structure becomes more refined and as new educational technologies become available. The project is indeed a comprehensive one, and its use of a

systematic startup process and the implementation of a careful evaluation plan are no doubt critical components in effectively moving the project forward. The commitment by all participants to contribute to the overall success of the project will no doubt provide a natural catalyst for such success as the project continues to implement its very aggressive set of goals and objectives.

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IV. Supplemental Information

The Community Discovered project is committed to staying on the "cutting edge" of educational technology use, and the project is evolving to take greater advantage of the evolution of the Internet. In particular, the project is making strong use of the World Wide Web for storage and retrieval of images and lessons. The World Wide Web will also be the basis for the evolving "portfolio" representing the project, so that educators from around the world can share in the information, knowledge, and resources generated by *The Community Discovered* project. Project activities will also make greater use of video-conferencing, listservs, telecommunications available on the Information SuperHighway, and other emerging delivery systems. Although budget considerations caused restrictions in originally planned cross-state partnerships, the evolution of technology (e.g., economical video-conferencing options) may allow for the pursuit of some of those activities which were at risk due to funding limitations. Also due to budget considerations, the project will be making a closer connection with the ESU's to deliver some of the technical support.

The National Museum of American Art has exercised solid leadership in the project and communicates regularly with many of the ATI participants and project staff. They have also been instrumental in helping identify useful images for incorporation in teacher lessons and units. The educational projects that have been developed by the pilot Art and Technology Integration project are multi-disciplinary in nature and cover a wide range of traditional disciplines (i.e.: physics, history, writing) and are providing an excellent initial model for both current and future participants of *The Community Discovered* project.

The evaluation process is also well underway, with considerable information already summarized and available through *The Community Discovered* World Wide Web page. The evaluation plan is an aggressive one, with both longitudinal and formative components and includes multiple sources of information to target each objective. Both qualitative and quantitative data is being collected, and it will be triangulated into activities involving both teachers and students in order to monitor and document the learning process planned in the project.

As *The Community Discovered* project moves forward, the original goals, objectives, and activities of the project have been examined and refined. Suggested revisions to these are included in appendix C. With the approval of the ILTO and the funding agent, these revisions will constitute the guiding practices of The Community Discovered.

Rationale Statements for Recommended Revisions of Goals and Objectives

The basis of the grant is an integration of art and technology in all core subject areas. Previously, goal statements reflected only the visual arts and art as a separate discipline from other subject areas. The recommended language of the goal statements indicates the integration of the arts and technology and explicitly includes the arts as one of the core subject areas.

Revision statements of goals and objectives includes the four strands we are developing in all areas of the project. The four strands are: 1) the arts, 2) technology, 3) constructivism, and 4) interdisciplinary planning and teaching. These four strands will be addressed in the staff development activities for our participants and will guide us in achieving the mission statement of the grant.

Percentages in the following objectives: 3.4, 3.5, 3.6, and 4.2 were deleted because the objectives are qualitative and not accurately reflected in such quantitative terms. Measurements could be addressed through participants perceptions, observational data, surveys, and matrixes such as Explanatory Effects and Case Dynamics. Cause-Effect Loops and Causal Networks would be appropriate designs as well to measure these objectives. Causal Networks link particular instances to general principles which would connect to the four strands being developed. Data collected will be triangulated with benchmark scores, and other quantitative indicators and be compiled in thick descriptions. The critical issue is the quality of the data entered. This component brings meaning and depth to the thick description methodology.

Recommended activity revisions regarding staff involvement have evolved as the grant has progressed. Review of essential functions for each position have proven beneficial in understanding the focus for each staff member.

Language was broadened in some goals and objectives, such as 5.3, to expand the opportunities for students. As teacher/learners and student/learners grow the potential for networking with a larger audience expands. The technology supports the constructivist process, and in turn the development of constructivist teaching networks, necessitates enhanced technological connectivity.

V. Budget Report

Personnel

The Art & Technology Coordinator and Computer Specialist were hired April 1, 1996 and the Site Coordinator and Project Supervisor began working June 1, 1996. Salaries for the Site Coordinator and Project Supervisor were paid as summer stipends, since both of them had been on contract with the district as certificated staff through the school year, and were employed by the grant for only 20 days each during the summer months (paid as stipends). Salaries for the Art & Technology Coordinator and Computer Specialist are shared with the Department of Education contributing $25,000 toward those positions annually. The Art and Technology Integration Project pays one half the salary of the site coordinator for the '96-'97 school year (for this budget period this will be approximately $7500). With these positions filled, all project staff are in place. It is anticipated that salaries for the remaining four months will expend approximately $150,000 of the unexpended $311,600 in this line. It is requested that $150,000 be reallocated to "Supplies" to cover expenditures in that category (see "Supplies" category for further explanation).

Benefits

Benefit costs were predicted on the basis of 28% of salary. As personnel positions are filled, actual benefit costs are more accurately reflected. Currently $26,142.00 have been expended. With the additional staff beginning with this school year, costs in this category will increase. The costs to be committed for the current funding period are predicted to be approximately $50,000 for the remaining four months. It is requested that $50,000 be reallocated to "Equipment" to cover expenditures in that category (see "Equipment" category for further explanation).

Travel

Currently $36,242 have been expended. Anticipated travel during the remaining three months for 1996, is projected to be approximately an additional $2,000 for project staff. Participant travel for recent inservices and meetings have not yet been invoiced. Anticipated remaining unobligated funds, if they exist, will be carried forward to cover costs for travel or will be reprogrammed, if appropriate and upon approval.

Equipment

Currently all funds in this category have been obligated ($14,000). It is requested that $50,000 be reprogrammed from the benefits category to equipment. This will allow for taking advantage of available resources to provide equipment needed for use in creating multimedia resources and compact discs to be used by all participants in the project. Such equipment was planned for purchase at a later time. It is available currently at reasonable costs.

Supplies

Currently this category reflects obligated funds in excess of the projected budget of -$20,125. The funds to cover these obligations are to be reprogrammed from personnel. While this reallocation is within the allowable margin for reprogramming without prior approval, it is anticipated that additional expenditures in this category will require further reallocation of existing resources. To accommodate these anticipated needs, including purchase of software resources, memory upgrades, professional development resources, and equipment for use in videoconferencing and distance education, it is requested that $150,000 be reprogrammed from personnel.

Contractual

A contract with the University of Nebraska at Omaha for project evaluation has been agreed upon, for an annual amount of $75,000.00. Contractual agreements with FarWest Labs/West Ed, for their role as consultants/site evaluators obligates an additional $15,000. An additional contract with the University of Nebraska at Omaha for a graduate research assistant obligates $15,000. All or most of these contracted obligations have not yet been expended. Further, consultants related to videoconferencing and distance education are expected to meet in November and will require resources that have not yet been specified. Currently $13,775 has been obligated, leaving a balance of $137,055. It is anticipated that the costs for contracted services will obligated the balance of funds in this category.

Other

While only $13,332 have been obligated as of August, 1996, it is anticipated that costs for the remaining items in this category will be obligated before the close of the budget period. If unobligated funds remain, they will be identified for carry forward or reprogramming, as appropriate.

Appendix A

Appendix B

Appendix C

The Community Discovered:
The Search for Meaning through the Integration of Art and Technology in K-12 Education

IMPACT ON STUDENTS

Goal 1: To enable students to achieve high academic standards in art and other core subject areas.
REVISION: To enable students to achieve high academic standards by integration of the arts and technology in all core subject areas.
Objective 1.1 80% of students in classes using the modules will show evidence of improved academic achievement as indicated by: a) decline in absenteeism, b) increased student self-concept as indicated by student attitude surveys and focus groups, c) students performing at higher levels as determined by each school's assessment of student progress and electronic portfolios where used.
REVISION: 80% of students in classes using the modules will show evidence of improved academic achievement as indicated by: a) decline in absenteeism, b) increased student self-concept as indicated by student attitude surveys and focus groups, c) students performing at higher levels as determined by assessments of student progress and electronic portfolios.

Activities	Timeline
• A longitudinal survey of student attendance records.	1996-2000
• Perform an annual student attitude survey.	1996-2000
• Annual focus groups for students.	1996-2000
• Collect information on student performance (electronic portfolios).	1996-2000
• Students will create an electronic portfolio and/or multimedia presentations.	1996-2000
Suggested Additions:	
• Provide students access to technology resources that support and guide self-directed learning	1996-2000
• Structure learning environments to empower students to make interdisciplinary connections	1996-2000
• Use the arts as the infrastructure t building holistic teaching-learning experiences	1996-2000
• Engage students in reflective processes of evaluating their own learning	1996-2000
• Promote critical thinking & problem solving through increased discussion, debate, cooperative learning groups and interdisciplinary teaching strategies	1996-2000
• Case studies (virtual cases compiled monthly on-line in response to questions)	1996-2000
• Tracking referral for SPED to monitor trends	
• Document evidence of student behaviors associated with engaged learning (indicators from "Plugging In")	1996-2000
• Evidence of more analytical thinking (Such as from student Product analysis)	1996-2000
• Electronic tracking of disciplinary to monitor trends	1996-2000
• Decline in teacher absences	1996-2000

MUSEUM RESOURCES

Goal 2: To provide students and educators in rural and disadvantaged urban areas with equal access to the information and resources available from state and national institutions associated with the arts.

Activity I: The Electronic Art Museum in the Classroom

Objective 2.1 A minimum of 750 art images and performing arts resources will be available through the Internet along with curriculum and contextual information for use by educators and students. Images will come from the collections of the Smithsonian NMAA; the Getty Museum; the Joslyn; the Sheldon, the MONA, the Kennedy Center, and regional performing arts agencies.

Activities	**Timeline**
• Museums will suggest appropriate images for which copyright issues have been resolved, and teachers may select from that pool of images.	1996-2000
• Suggestions by teachers for specific themes, cultures, or time periods will be utilized by museum staff in guiding their efforts to make resources available electronically.	1996-2000
• The five museums will digitize 750 art images resources from their collection (collectively each year).	1996-2000
• Hypertextual and contextual information to accompany each image will be developed.	1996-2000
• Educators will access the images along with contextual information.	1996-2000
• Teachers will review the Smithsonian's thematic cluster CDs for potential resources.	1996-2000
• A database of images will be created.	1996-2000
• Museum links will be updated regularly on the ARTnet web site.	1996-2000
• Teacher requests regarding arts resources that would be most useful will be communicated to partner agencies to guide planning	1996-2000
• Make teachers aware of new programs on-line (such as those from NMAA: Mythology and Paul Manship, Pueblo Indian Watercolors, and a William H. Johnson Teaching Guide) as teaching resources.	1996-2000
• Utilize museums' mailing lists for education packets, materials, and exhibits.	1996-2000

Objective 2.2 Museum educators at the Joslyn Art Museum, the Sheldon and MONA will each develop at least one educational outreach program using appropriate technologies such as the Internet, kiosk, and interactive multi-media.

Activities	**Timeline**
• Museums will develop and document outreach programs using CD/ROM and/or Internet.	1996-2000
• Work with museums to keep them updated on what outreach programs would be most helpful to teachers (ie, math and science areas, multicultural connections)	1996-2000

TEACHER TRAINING

Goal 3: To enable educators to effectively use appropriate technologies for teaching and learning in art and other core subject areas.

REVISION: To enable educators to effectively use appropriate technologies for constructivist teaching and learning across the curriculum.

Activity II: Computer-Based Educational Strategies

Activity III: Professional Development and Support for Educators

Objective 3.1 Through collaboration with private companies, project educators will test and evaluate five commercial technology tools (i.e. software packages) per year for applicability to classroom settings and instructional objectives.

REVISION: Objective 3.1 Through collaboration with private companies, project educators will test and evaluate commercial technology tools (i.e. software packages) annually for applicability to classroom settings and instructional objectives.

Activities	**Timeline**
• Educators will test, evaluate, and adapt commercially produced technology tools in classroom settings.	1996-2000

- Electronic portfolio software packages will be examined and evaluated by teachers. 1996-2000
- Teachers and students will collaborate using video conferencing. 1996-2000
- Assist with developing a software evaluation form for teachers to utilize 1996-2000

Objective 3.2 By 1996, each school site in participating districts will have access to technology resource persons available to assist teachers in evaluating and selecting appropriate technologies.

REVISION: By 1996, each school site in participating districts will have access to technology resource persons available to assist in evaluation, selection, and application of appropriate technologies.

Activities **Timeline**

ADDITION: Assist teachers in evaluating and selecting appropriate technologies. 1996-2000

- Technology resource persons from participating districts, NDE, UNO, the ESU's, and from commercial companies will be identified and consulted for technical assistance when needed. 1996-2000
- Technology resource persons will conduct software and hardware workshops. 1996-2000

Objective 3.3 By 2000, 300 Nebraska educators, including 60 educators of rural and urban disadvantaged students, will be trained on computer-based educational strategies and integrated constructivist curriculum to effectively integrate art and other core subjects.

REVISION: By 2000, 300 Nebraska educators, including 60 educators of rural and urban disadvantaged students, will be trained on computer-based educational strategies and interdisciplinary constructivist curriculum to effectively integrate art and technology in all core subjects areas.

Activities **Timeline**

- Each participant will identify a partner with whom to collaborate on curriculum integration. The partner will attend a one day curriculum integration workshop. 1996-2000

  ADDITION: Participating teachers will attend summer workshops and institutes to prepare them in the areas of the arts, technology, constructivism, and interdisciplinary teaching utilizing the resources of partner agencies and organizations such as the NDE, NMAA, Kennedy Center, NAC, and state art agencies.
- Teachers will review, analyze, and integrate arts resources. 1996-2000
- Workshops on curriculum integration, constructivism, electronic portfolios, and technology will be held. 1996-2000
- Provide teachers with workshops on creating slide shows, HyperStudio stacks, Web pages; interdisciplinary unit construction; data collection strategies (include UNO eval team); team building strategies; working with Listserv and with accessing images from the Internet.
- Site Coordinators will create a list of materials/software/hardware needs from teacher requests.

Objective 3.4 By 2000, 90% of project participants will demonstrate an increase in skills and knowledge in: a) use of computer based educational strategies and resources, b) constructivism, c) curricula integrating art and other core subjects, d) use of electronic portfolio and other appropriate assessment strategies.

REVISION: By 2000, project participants will demonstrate an increase in skills and knowledge in: a) use of appropriate technologies, b) constructivism, c) integrating art across the curricula, d) interdisciplinary curriculum development and instruction, e) use of electronic portfolio and other appropriate assessment strategies.

(The percentages in objective 3.4, objective 3.5, objective 3.6 and objective 4.2 should be eliminated because they are too qualitative to measure by percentage.)

Activities **Timeline**

- **ADDITION:** Each participant will attend at least 80% of professional development activities offered 1996-2000
- Each participating district will work with their ESU for technology support and mentors. 1996-2000
- Each participant will be assigned a curriculum integration mentor from the Prairie Vision faculty. 1996-2000
- NDE curriculum directors and specialists will provide assistance in core subject areas. 1996-2000
- Each participant will use electronic portfolios and other appropriate assessment strategies to reflect on their progress. 1996-2000

Objective 3.5 90% of project participants will successfully complete a minimum of 80% of the professional development activities they choose in their Professional Growth Plans.

REVISION: Project participants will successfully complete a continuous professional growth plan, evaluate their performance relative to that plan at least annually, and modify it to reflect their progress.

Activities **Timeline**

- Each participant will create a Professional Growth Plan. 1996-2000
- **ADDITION:** Participant's growth plan will be submitted to Community Discovered Office and progress reviewed by the evaluation team 1996-2000
- **ADDITION:** Site coordinators will review progress toward meeting the specific objectives of the growth plans and assist participants in updating the plan as a Continuous Growth Plan.

Objective 3.6 90% of project participants will report positive attitudes towards the use of technology as an educational tool.

REVISION: Project participants will report attitudes towards the integration of the arts and educational tools in an interdisciplinary constructivist teaching approach.

Activities **Timeline**

- A survey of teacher attitudes and teacher interviews regarding integration of the arts and technology, adoption of constructivism, and interdisciplinary pedagogy will be completed each year. 1996-2000
- Links with participants will be made throughout the school year as encouragement and support to their unit development. 1996-2000

Goal 4. To enable educators to implement effective integrated curricula incorporating art and other core subjects.
REVISION: To enable educators to implement effective integrated curricula incorporating the arts and technology.

Activity IV: Integrated Curriculum, Instruction, and Assessment Strategies

Objective 4.1 Constructivist curriculum modules will be developed by each participant and implemented incorporating one or more of the following: a) Internet digitized images and museum resources, b) other Internet resources, c) multi-media projects, d) electronic portfolios, and e) other computer applications. (Goals 1-4)

Activities **Timeline**

- Each teacher will develop two units during the first year and one unit in each successive year 1996-2000
- throughout the term of the grant
- The units will be indexed and placed on each district's world wide web server. 1997-2000
- **REVISION: The units will be indexed and placed on the Community Discovered**
- **world wide web server.**
- Participants will receive school year and summer support to work on their projects. 1996-2000
- First year = 15 days summer, 8 sub-covered days school year, partners 2 summer and 3 school
- Second year = 5 days summer, 8 sub-covered days school year, partners 2 and 3
- Partners will work with mentors and agency partners in collaboration with participants 1996-2000

- Teachers will communicate with museum docents in creating curriculum for their classrooms
- **ADDITION:** Evaluate the efficacy of the allotted time for participation in workshops and curriculum development and revise as needed to support the goals of the project. 1997-2000
- Partners will take advantage of professional development opportunities through the project. 1997-2000

Objective 4.2 Participating teachers will effectively use one or more computer-based education strategies in their classrooms. Strategies will include Internet resources, electronic portfolios, Hypertext, multimedia, and others.

Activities **Timeline**

- Site coordinator will work with each participating teacher to develop units 1996-2000
- Site coordinator and evaluators will provide feed back 1996-2000
- Arts agencies will provide assistance and resources 1996-2000

Objective 4.3 By 2000, the project will produce a comprehensive system of world wide web pages containing links to art resources and sample lessons developed by participating schools and available to Prairie Visions Consortium members through ARTnet.

REVISION: By 2000, the project will produce a comprehensive system of world wide web pages containing links between appropriate resources and the curriculum units developed by participating educators.

Activities **Timeline**

REVISIONS:

- The site coordinators will identify links to art resources, curriculum integration units, and assist teachers to integrate these in all subject areas. 1996-2000
- The Project Director will coordinate the development and integration of the web site across all aspects of the project. 1996-2000
- The Art and Technology Coordinator, working with the computer specialist and museum resource personnel, will develop the district pages and units using a standard format. 1996-2000
- A database of units and art resources will be complied and available on the web site. 1996-2000
- **REVISION: The Art and Technology Coordinator and Computer Specialist will develop and compile a database of units and art resources.**
- ARTnet facilitator will link project resources to Prairie Vision members 1996-2000
- **REVISION: The Art and Technology Coordinator and Computer Specialist will link project resources to other resources and organizations accessible on the world wide web.**

NETWORK

Goal 5: To create a national network of educators to support the development and implementation of appropriate learning strategies integrating art and technology with other core subject areas.

Activity V: Nationwide Community for Art and Technology Integration

Objective 5.1 ARTnet will be in place to provide curriculum models, museum resources, and continuing opportunities for information sharing, collaboration and support among educators.

Activities **Timeline**

- ARTnet will link participants and experts 1996-2000
- ARTnet will provide access to curriculum modules, digitized images, and other museum resources 1996-2000
- ARTnet will support the ARTnet listserv and project related distribution lists
- **REVISION: The Art and Technology Coordinator and Computer Specialist will support**

the ARTnet Web System, The Community Discovered Web Site, The Community Discovered listserv, and project related distribution lists.

- The NMAA Education Dept will communicate with ARTnet and Prairie Visions in creating summer training for teachers that meets the objectives of The Community Discovered Grant. **Timeline** 1996-2000
- **REVISION: NMAA Education Department, ARTnet, and Prairie Visions, will communicate with the Community Discovered staff in creating summer training opportunities for teachers that can meet the objectives of the Community Discovered Grant.**

Objective 5.2 Cross-state partnerships will be encouraged to support replication and enhancement of project activities.

Activity **Timeline**

REVISION: Electronic portfolios will be available on-line so the resources can be shared with other Challenge Grants, and other interested projects. 1996-2000

Objective 5.3 As a pilot cross-state partnership, the Community Discovered project and other projects will collaborate to expand on an effective integrated project in which teachers and students within the project will have the opportunity to communicate electronically with other teachers and students.